



# UNITED STATES PATENT AND TRADEMARK OFFICE

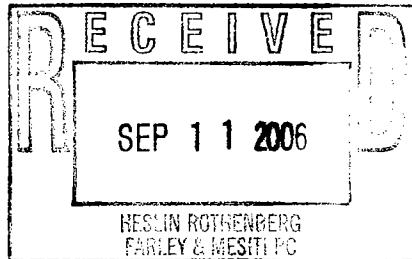
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,318	10/31/2003	James V. Crivello	0094.072	5438
23405	7590	09/06/2006		EXAMINER
HESLIN ROTHENBERG FARLEY & MESITI PC 5 COLUMBIA CIRCLE ALBANY, NY 12203				MCCLENDON, SANZA L
			ART UNIT	PAPER NUMBER
			1711	

PEX

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/700,318	CRIVELLO, JAMES V.
	<b>Examiner</b>	<b>Art Unit</b>
	Sanza L. McClendon	1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 31 October 2003.  
 2a) This action is **FINAL**.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-26 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10,20-22 and 26 is/are rejected.  
 7) Claim(s) 11-19 and 23-25 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 10/03 and 1/05.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102/35 USC § 103***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10, 20-22, and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Urban et al (4,717,605).

Urban et al teaches radiation curable epoxy-based adhesive compositions useful for bonding glass substrates for optical parts. Said compositions comprise an ionically polymerizable epoxide system and an ionic photoinitiators of the triarylsulfonium complex salt type and may, additionally, comprise an ethylenically unsaturated substance and a free radical photoinitiator. Said epoxide compounds can include those found in column 3. Said sulfonium salt photoinitiators can be found in column 3, also. These comprise complex anions such as tetrafluoroborate, hexafluorophosphate, hexafluorarsenate, or hexafluorantimonate—see column 3, lines 60-61. Said composition is cured by radiation, such as UV. The curing method includes exposing said composition to UV light from, for example, a high pressure mercury lamp with an lamp output of 100 W for 5 to 20 seconds. Wherein, Urban et al teaches this partial cure step does not change the state over a relatively long period so that is it possible to manipulate the adhesive. After said period a

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final cure is induced by irradiating the pre-cure adhesive over a time not more than 2 minutes—see column 6 and the examples. Urban et al is silent with regard to the temperature in the curing steps, therefore the examiner, as well as, one of ordinary skill in the art would interpret this as room-temperature. Thus it is deemed that step (b) in claims 1, 5, 8, and claim 2 are read in the reference. It is deemed that claim 3 is read in the reference since the second, longer irradiation step in combination with the 10 cm exposure distance is deemed to generate heat from the lamp itself, as well as, the heat generated from the curing reaction taking place during the 2<sup>nd</sup> exposure step. In contrast to the 1<sup>st</sup> irradiation step, which is deemed not to be long enough for any heat generation from the lamp or curing mechanism.

Regarding the 1<sup>st</sup> viscosity limitation of 500,000 cP, it is deemed that applicant has not established the criticality of said 1<sup>st</sup> viscosity. Therefore it is deemed, in the absence of evidence to the contrary and/or unexpected results, that the process as instantly claimed would have worked equally as well with any 1<sup>st</sup> starting viscosity.

Regarding claim 6, applicant has not established the criticality of exposing said composition to a total irradiation of 500 to 10,000 mJ/cm<sup>2</sup>. Therefore, it is deemed, in the absence of evidence to the contrary and/or unexpected results, that any exposure step known by a skilled artisan having an ordinary skill level would have worked equally as well. However, in the alternative, since the Patent and Trademark Office is not equipped to conduct experimentation in order to determine whether Applicant's composition differs and, if so, to what extent, from the discussed reference. Therefore, with the showing of the reference, the burden of establishing non-obviousness by objective evidence is shifted to the Applicants.

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It is noted that Urban et al teaches that epoxy composition not comprising the ethylenically unsaturated compound and free radical photoinitiator cured completely in the 5 to 20 second 1<sup>st</sup> cure stage—see column 6--, however since applicant's instantly claimed adhesive has open-ended language (comprising) it does not exclude additional un-recited elements or components. Therefore the epoxy composition comprising additional ethylenic compounds and initiators of Urban et al reads on the invention as instantly claimed.

Regarding claim 26, it is deemed obvious since instruction, are well known, in adhesive kits, especially, when they are commercially available.

***Allowable Subject Matter***

4. Claims 11-19 and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach said compounds as found in instant claims 11-19 in command cure adhesive as instantly claimed. Nor does the prior art, alone or in combination, teach command cure adhesive wherein the curing steps of claims 23-25 are expressly taught or even fairly suggested.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L. McClendon whose telephone number is (571) 272-1074. The examiner can normally be reached on Monday through Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sanza L. McClendon

Examiner

Art Unit 1711

SMc

<b>Notice of References Cited</b>	Application/Control No.	Applicant(s)/Patent Under Reexamination	
	10/700,318	CRIVELLO, JAMES V.	
Examiner	Art Unit	1711	Page 1 of 1
Sanza L. McClendon			

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,717,605	01-1988	Urban et al.	428/1.53
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

SUPPLEMENTAL INFORMATION DISCLOSURE CITATION		Docket No.: 0094.072	Serial No.: 10/700,318
		Inventor: James V. Crivello	Examiner: Aftergut, Jeff H.
		Filing Date: 10/31/03	GAU: 1733

UNITED STATES PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
SMc	AD	4,289,595	09/15/81	Tortorello	204		
SMc	AE	5,144,051	09/01/92	Kessel et al.	556		

#### UNITED STATES PATENT APPLICATION PUBLICATIONS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
SMc	BA	2001/036,591	11/01/2001	Ilg et al.	430		

#### FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Int'l Class	Int'l Subclass	Translation	
							Yes	No

#### OTHER DOCUMENTS (Including Author, Title, Date Pertinent Pages, Etc.)

SMc	CH	PCT Notification of Transmittal of the International Search Report and the Written Opinion of the International Searching Authority, or the Declaration, dated 11/24/2004.

EXAMINER: /Sanza McClendon/ (07/11/2006) Date Considered

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609;  
Draw line through citation if not in conformance and not considered. Include copy of this form with next  
communication to applicant.

IDS - 10/31/2003

INFORMATION DISCLOSURE  
CITATION

Docket No.: 0094.072

Serial No.:

Inventor: James V.  
Crivello

Examiner:

Filing Date:

GAU:

## UNITED STATES PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subcl ass	Filing Date If Appropriate
SMc	AA	3,457,193	07/22/69	Tinsley et al.	260	2	June 30, 1065
SMc	AB	3,415,794	10/10/68	Orth et al.	260	78.5	March 28, 1966
SMc	AC	5,463,084	11/31/95	Crivello et al.	549	214	February 1, 1993

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Int'l Clas s	Int'l Subclass	Translation	
							Yes	No

## OTHER DOCUMENTS

(Including Author, Title, Date Pertinent Pages, Etc.)

SMc	CA	H. Sasaki and J.V. Crivello, "The Synthesis, Characterization, and Photoinitiated Cationic Polymerization of Difunctional Oxetanes", <i>Journal of Macromolecular Science-Pure Appl. Chem.</i> A29(10), 915-930 (1992).
SMc	CB	J.V. Crivello and H. Sasaki, "Synthesis and Photopolymerization of Silicon-Containing Multifunctional Oxetane Monomers", <i>Journal of Macromolecular Science-Pure Appl. Chem.</i> A30 (2&3) 173-187 (1993).
SMc	CC	J.V. Crivello and H. Sasaki, "Structure and Reactivity Relationships in the Photoinitiated Cationic Polymerization of Oxetane Monomers", <i>Journal of Macromolecular Science-Pure Appl. Chem.</i> A30 (2&3) 189-206 (1993).
SMc	CD	B. Falk et. al., "Monitoring Photopolymerization Reactions with Optical Pyrometry", <i>Journal of Polymer Science: Part A: Polymer Chemistry</i> , 41, 579-596 (2003).
SMc	CE	C. Decker et. al., "Light Intensity and Temperature Effect in Photoinitiated Polymerization", <i>ACS Symp. Ser.</i> 673, 63 (1997).
SMc	CF	Hiroshi Sasaki Toagosei Co. Ltd., "Oxetanes: Curing Properties in Photo-Cationic Polymerization", <i>RadTech Technical Proceedings</i> , 61-68 (2000)

SMc	CG	Bidali et. al., "Heat and UV – Ignited Frontal Polymerization of an Epoxy Resin", Poster from Presentation from Ischia, Italy, June 2003.	
EXAMINER:/Sanza Mcclendon/ (07/11/2006)		Date Considered	
<b>EXAMINER:</b> Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

## AMENDMENT TRANSMITTAL LETTER (Small Entity)

Applicant(s):

Docket No.

0094.072

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/700,318	October 31, 2003	McClelland, Sanza L.	23405	1711	5438

Invention: COMMAND-CURE ADHESIVES

COMMISSIONER FOR PATENTS:

Transmitted herewith is an amendment in the above-identified application.

Applicant claims small entity status. See 37 CFR 1.27

The fee has been calculated and is transmitted as shown below.

## CLAIMS AS AMENDED

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	26 -	26 =	0	x \$25.00	\$0.00
INDEP. CLAIMS	4 -	4 =	0	x \$100.00	\$0.00
Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00

No additional fee is required for amendment.

Please charge Deposit Account No. \_\_\_\_\_ in the amount of \_\_\_\_\_

A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.

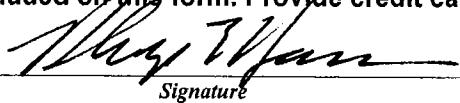
The Director is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 08-1935

Any additional filing fees required under 37 C.F.R. 1.16.

Any patent application processing fees under 37 CFR 1.17.

Payment by credit card. Form PTO-2038 is attached.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

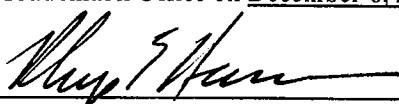


Signature

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